

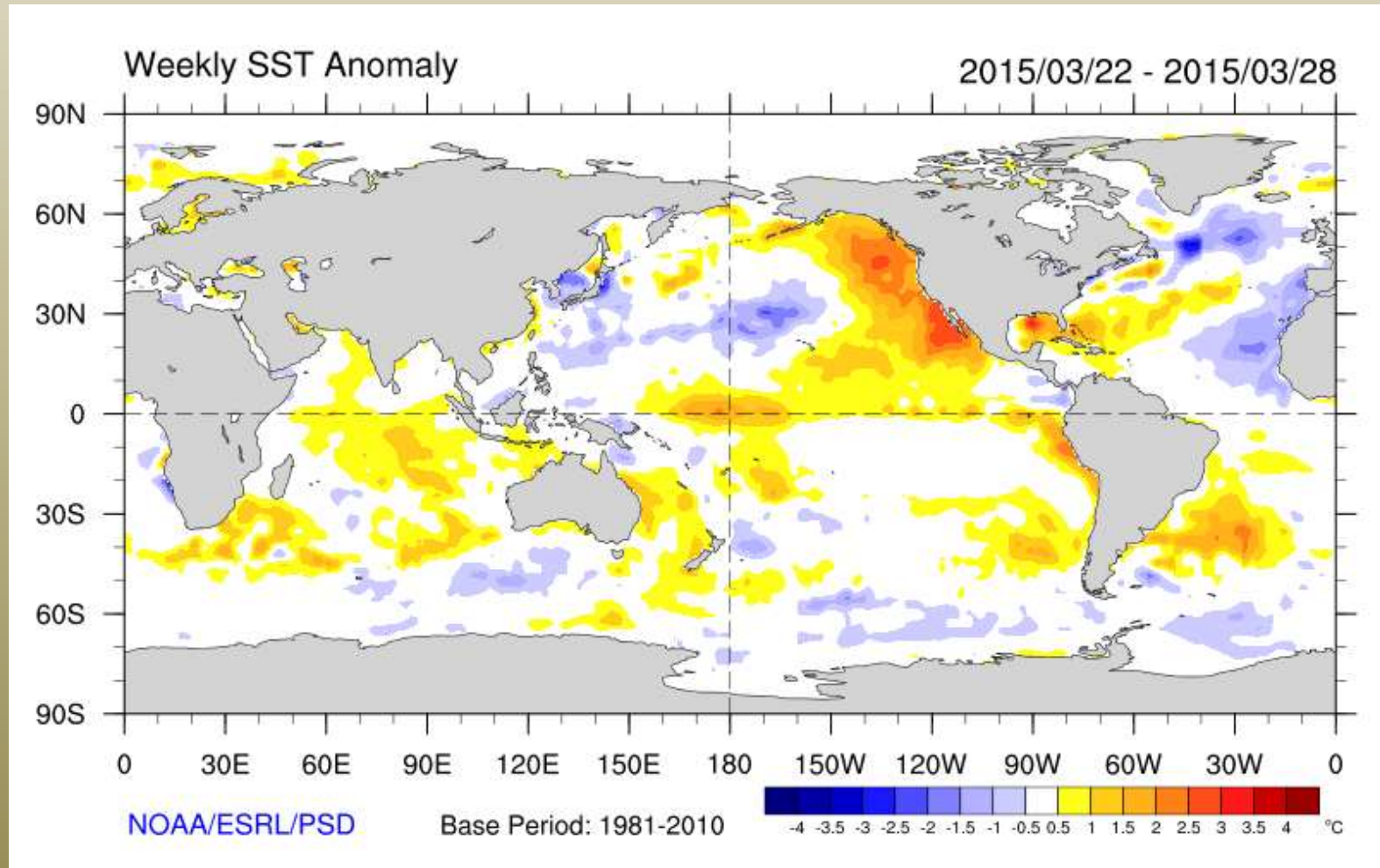
2015 Fire Season Outlook



Tom Rolinski – Predictive Services

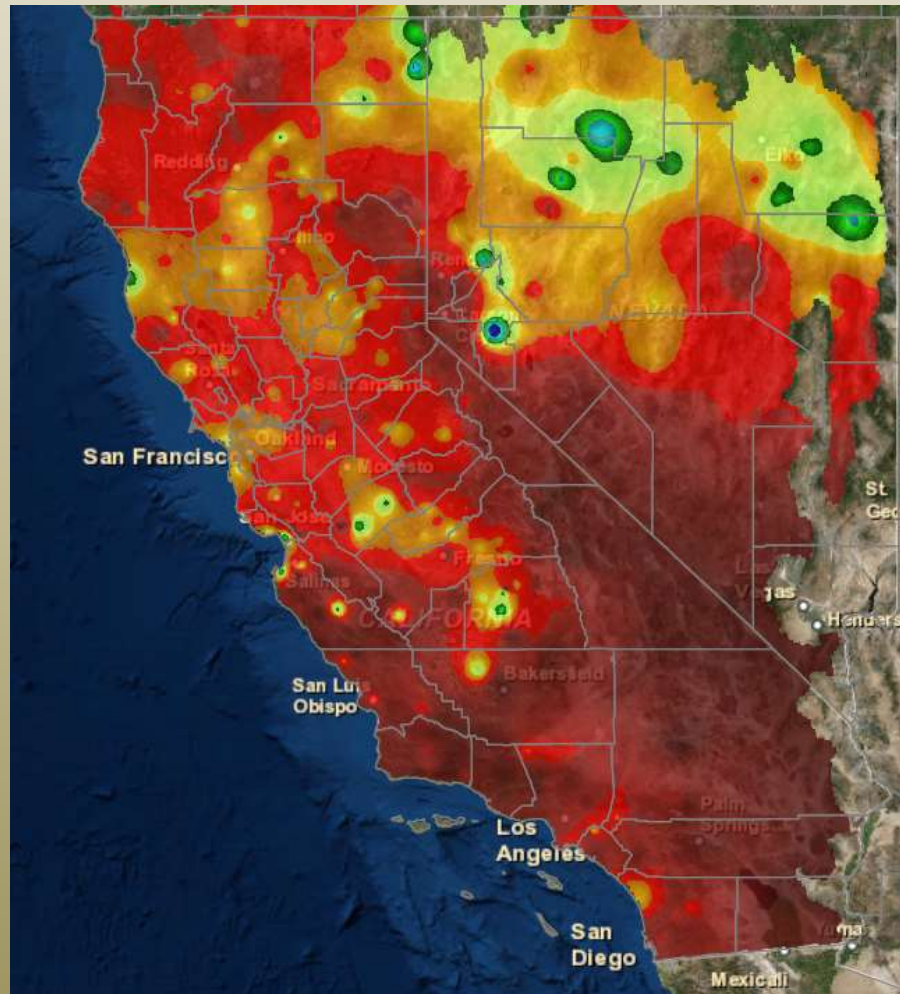
What happened to El Niño?

Atmosphere did not respond to changes in sea surface temperatures

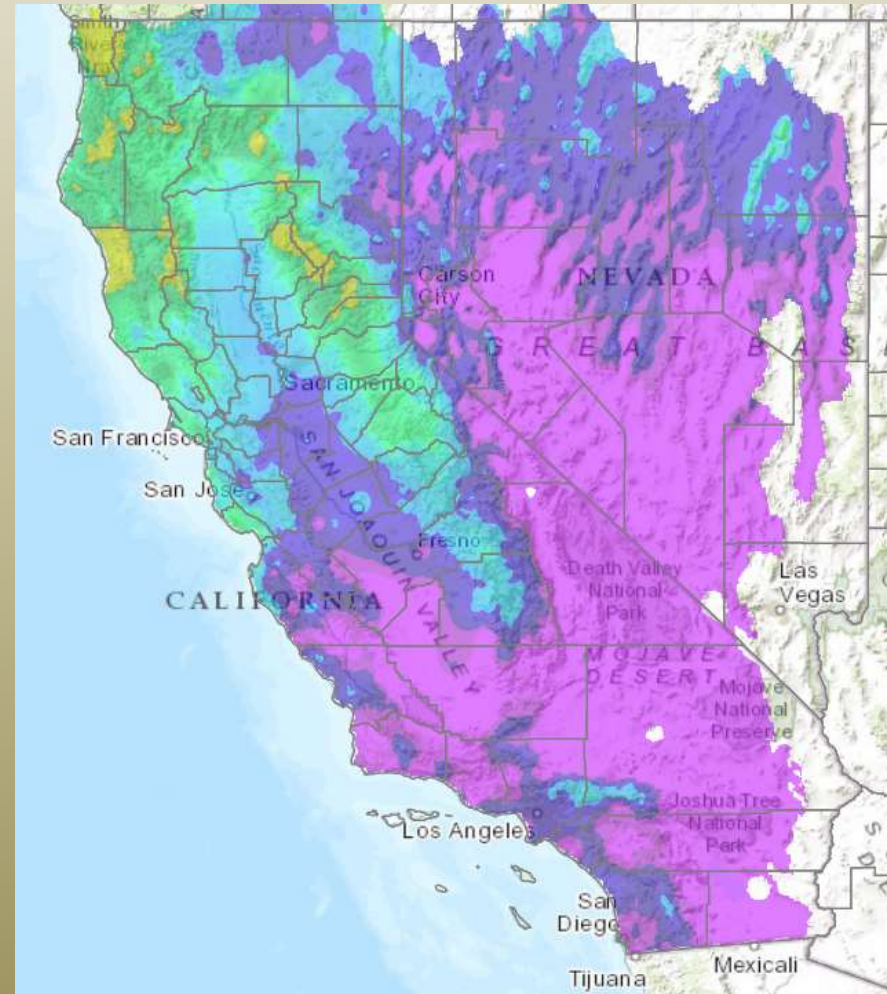
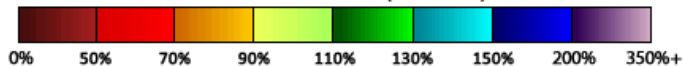


Precipitation Departure from Normal

November 2014



Percent of Normal (Gridded)

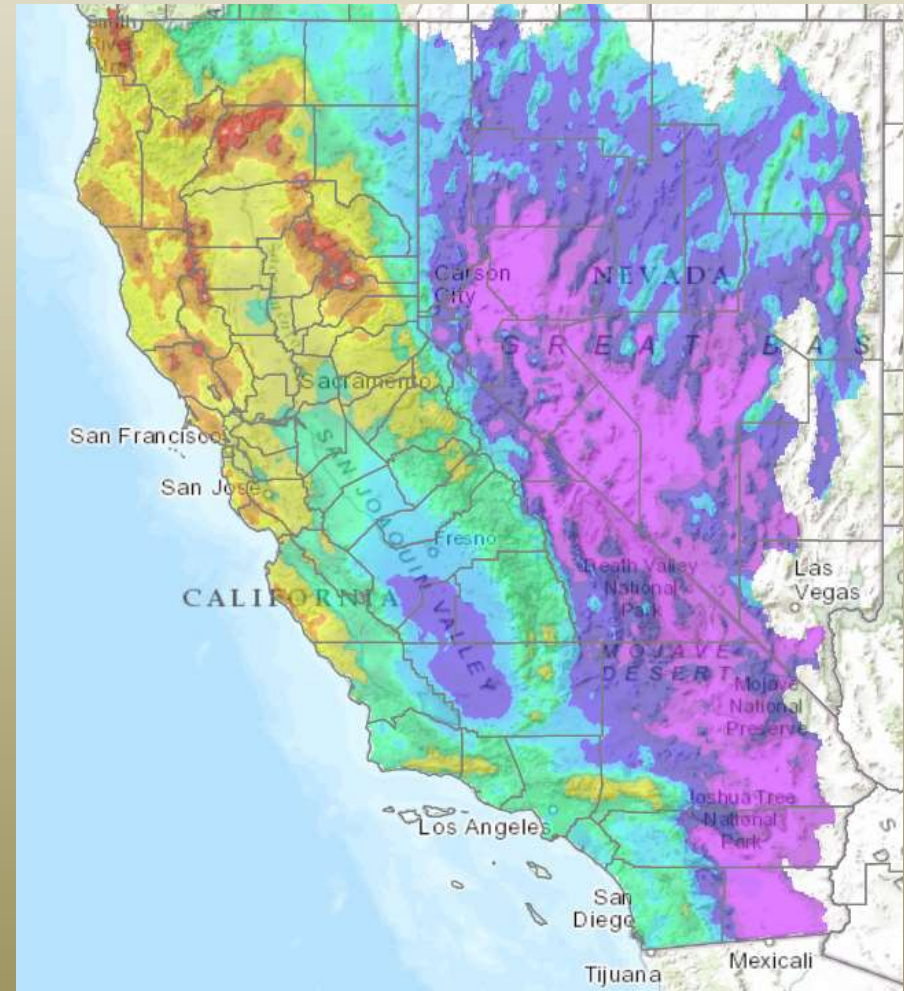
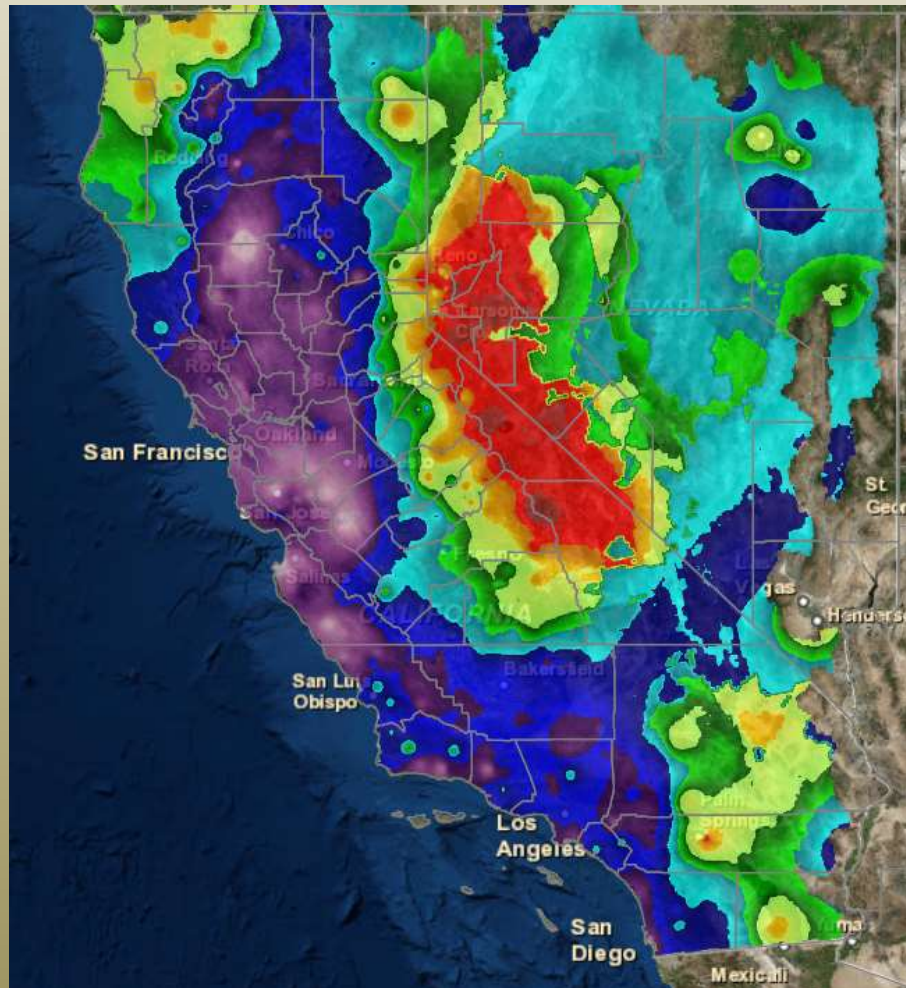


Precipitation (inches)

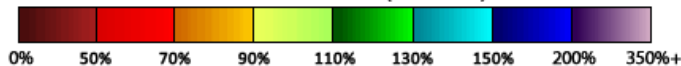


Precipitation Departure from Normal

December 2014



Percent of Normal (Gridded)

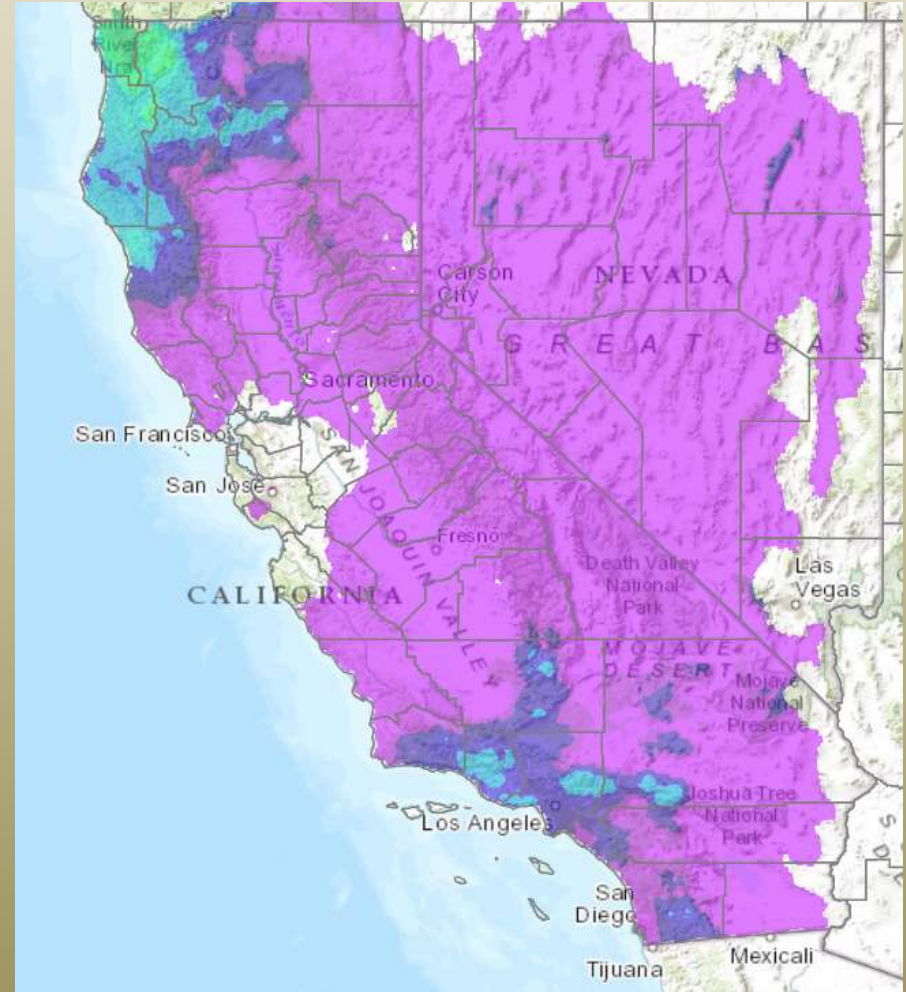
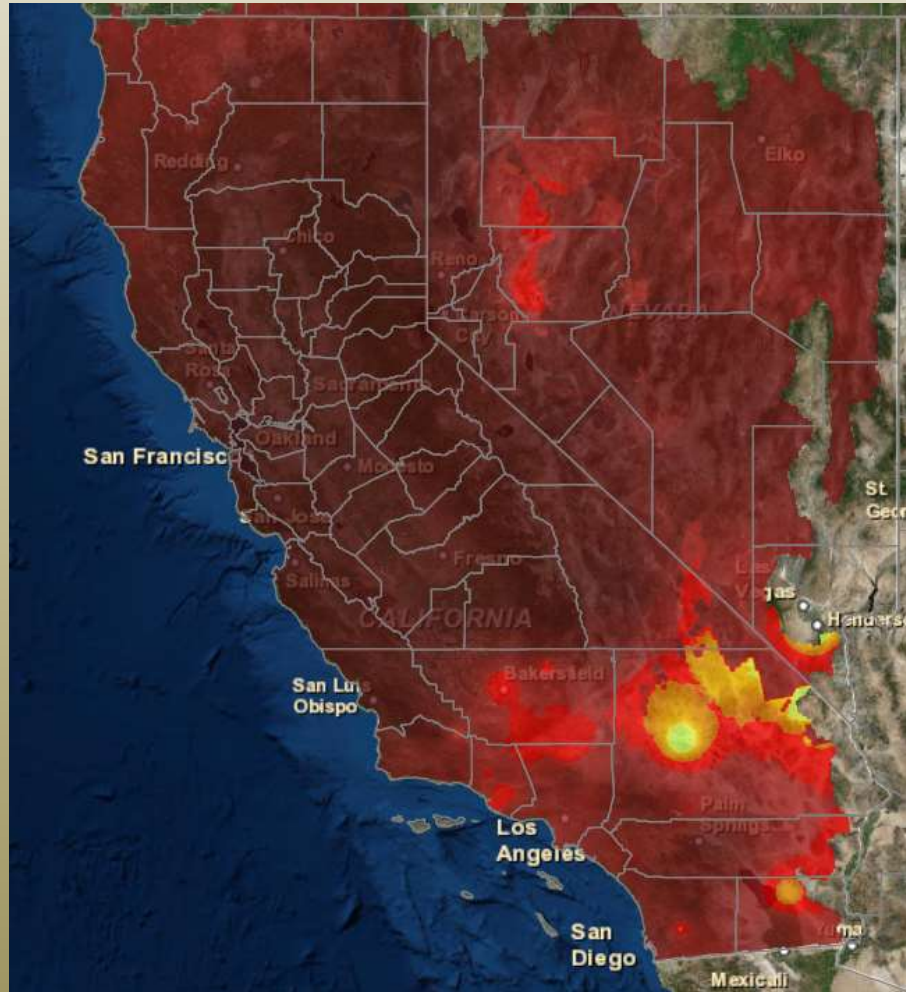


Precipitation (inches)

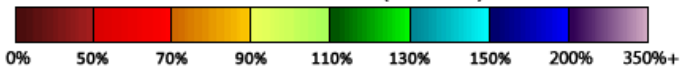


Precipitation Departure from Normal

January 2015



Percent of Normal (Gridded)

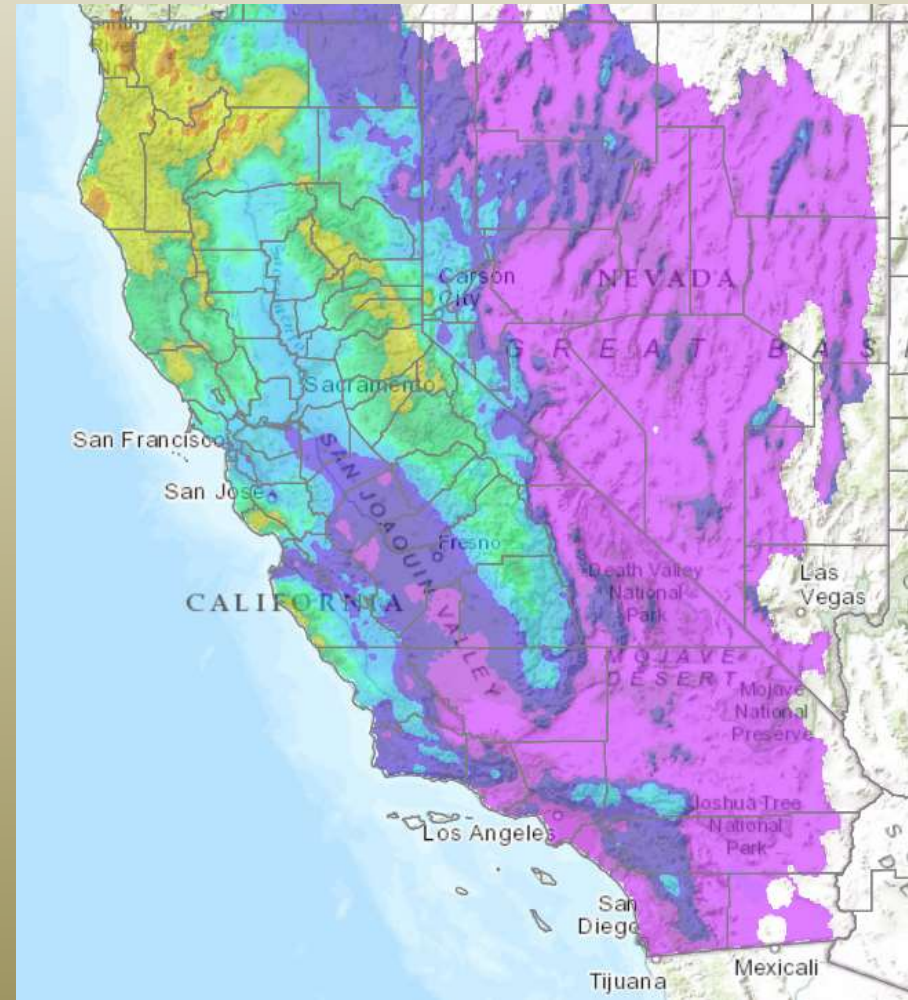
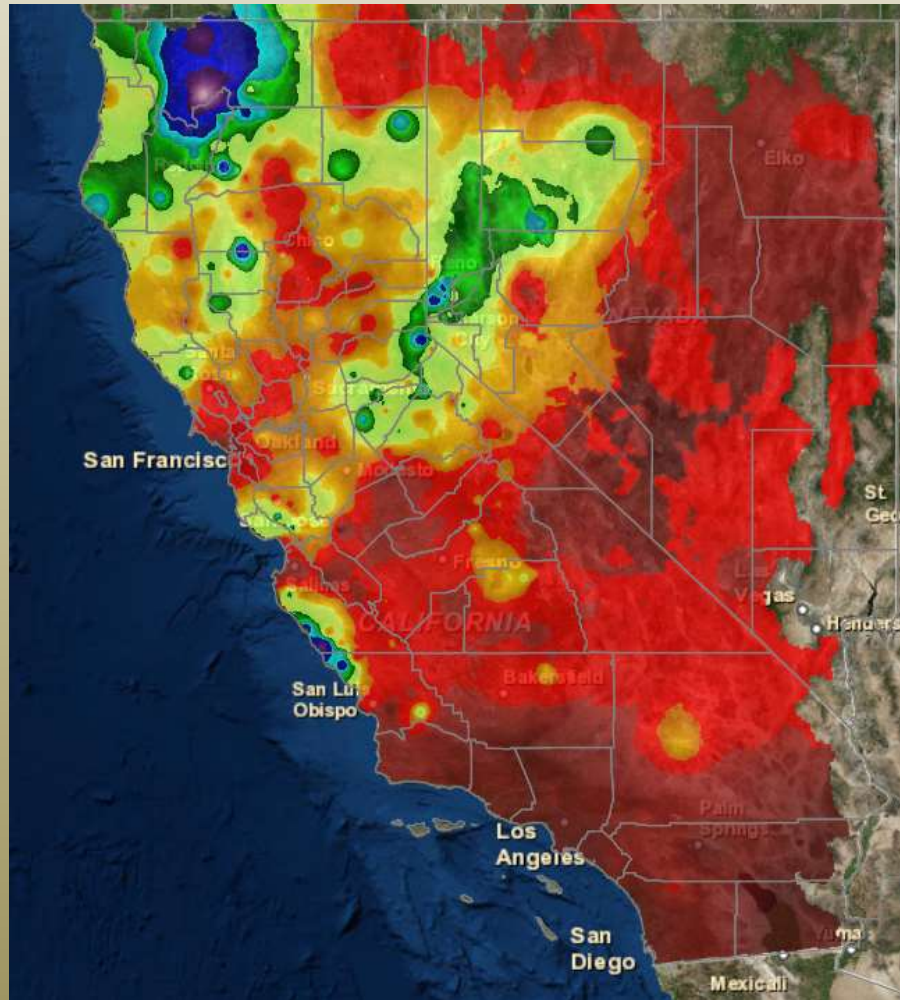


Precipitation (Inches)

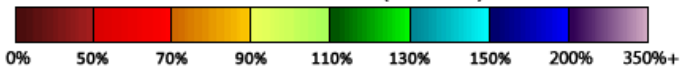


Precipitation Departure from Normal

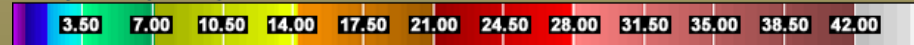
February 2015



Percent of Normal (Gridded)



Precipitation (inches)

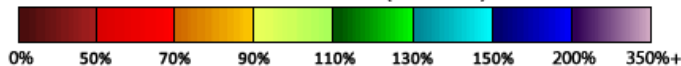


Precipitation Departure from Normal

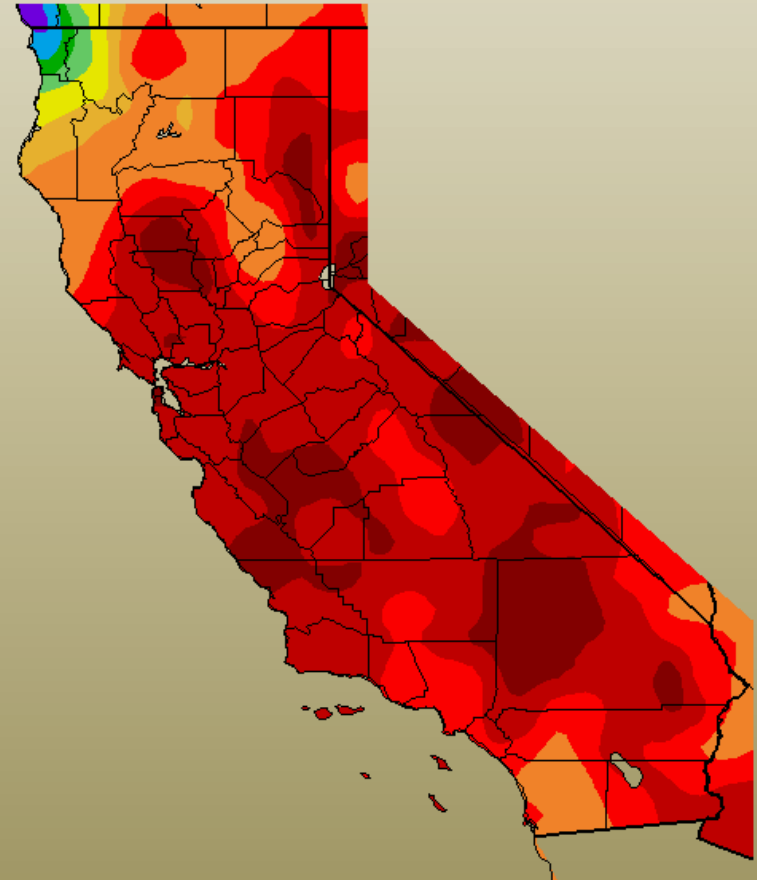
March 2015



Percent of Normal (Gridded)

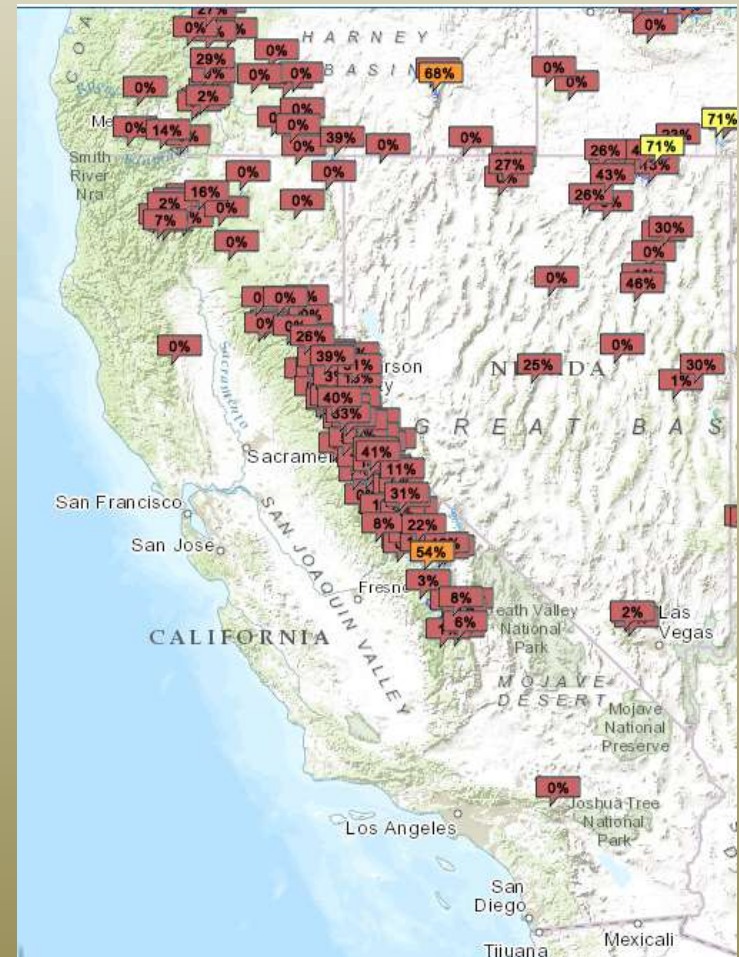


Total Precipitation (in.)
3/1/2015 – 3/29/2015



Generated 3/30/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

High Resolution Composite Satellite imagery (Feb 1 – March 5) showing snow cover

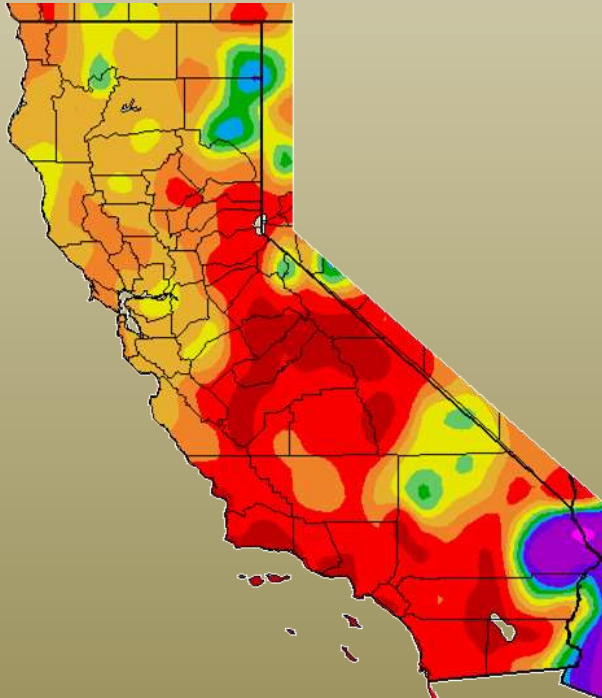


Sierra Snowpack

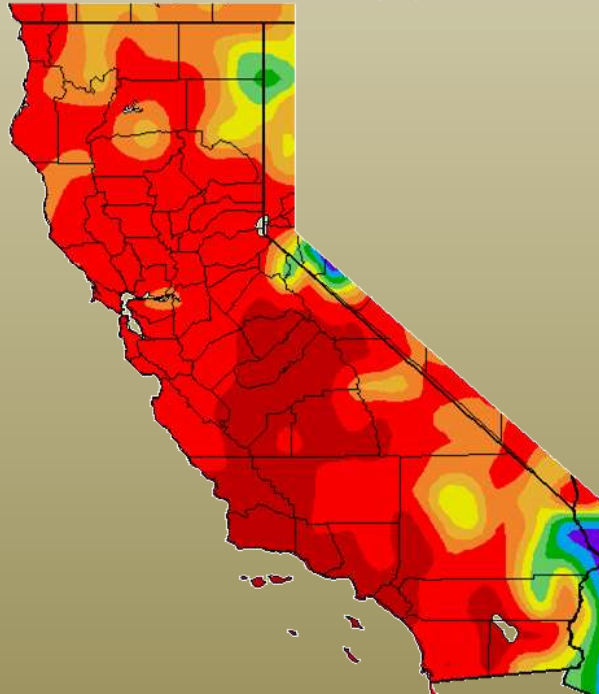


California's Precipitation

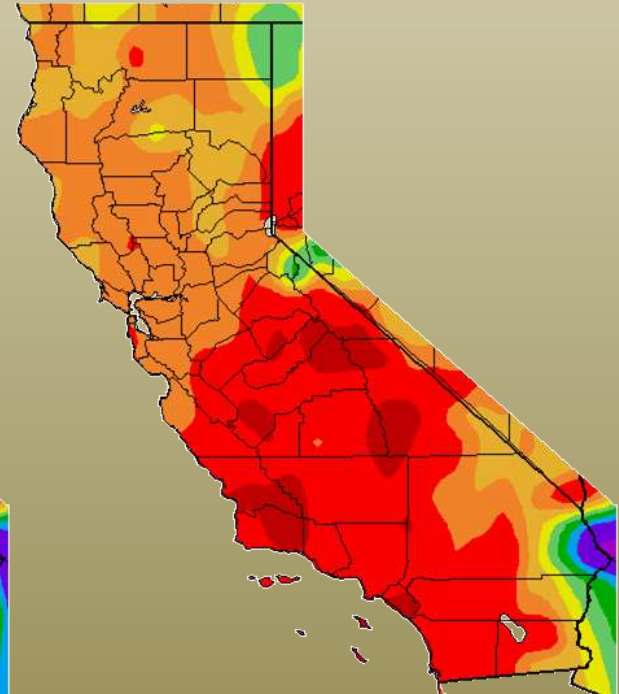
1 Year



2 Years

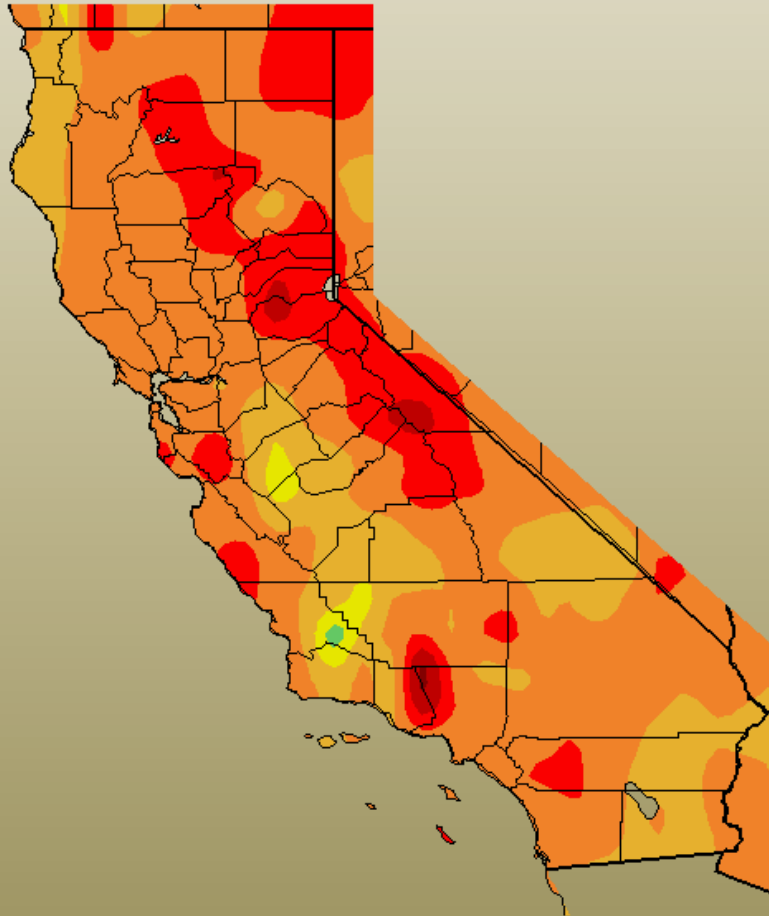


3 Years



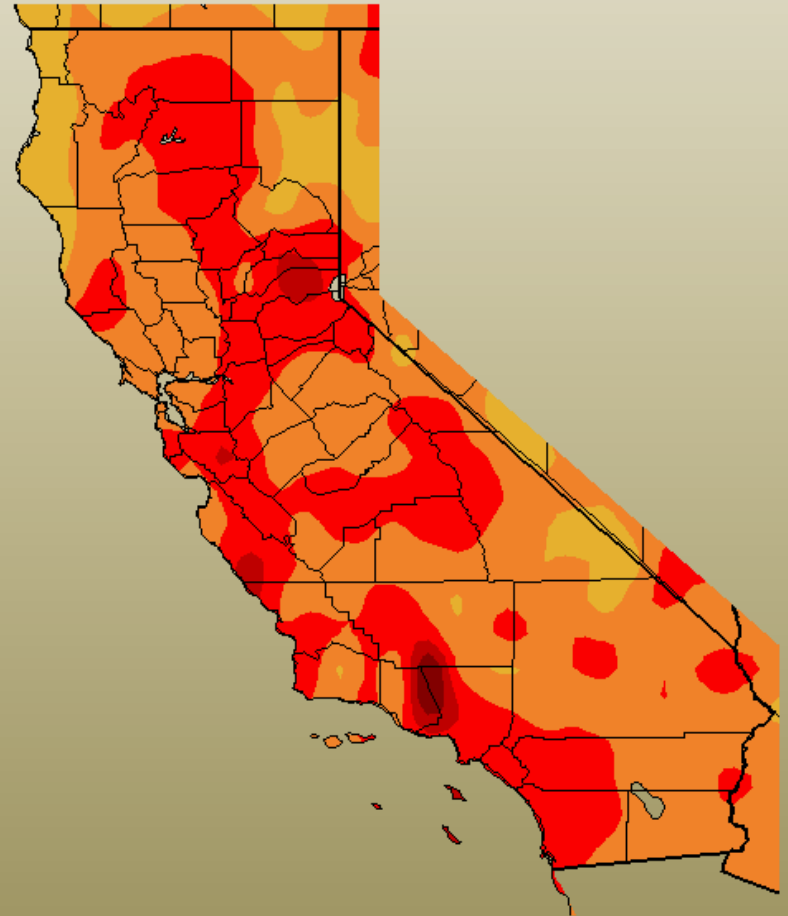
A Very Warm Winter

Ave. Temperature dep from Ave (deg F)
12/30/2014 – 3/29/2015



Generated 3/30/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
3/1/2015 – 3/29/2015



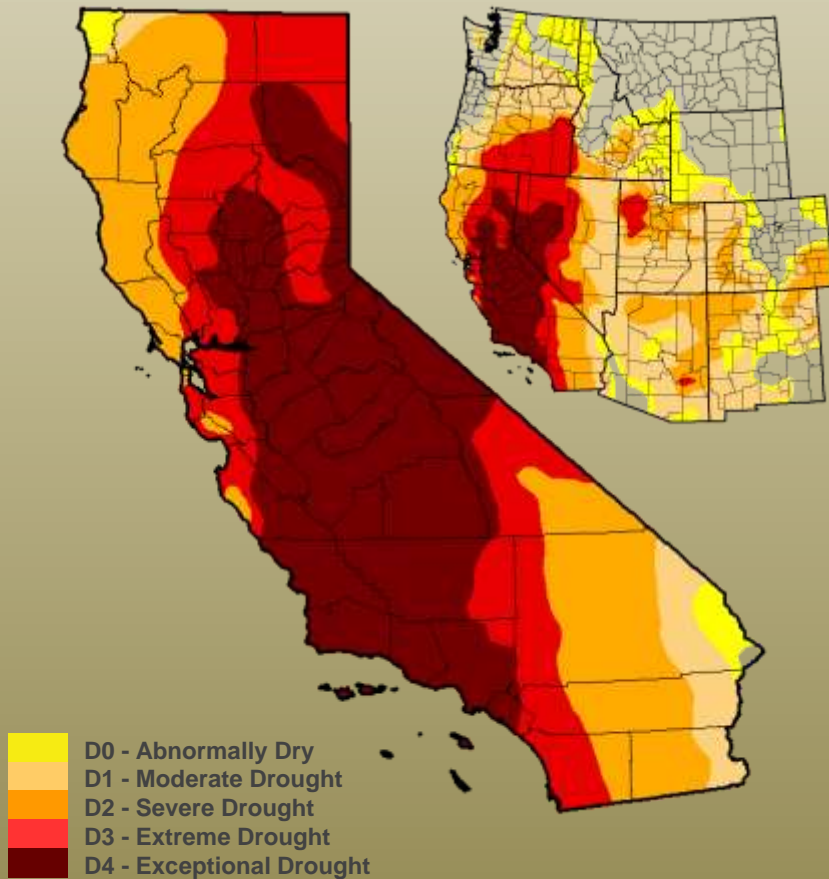
Generated 3/30/2015 at WRCC using provisional data.
NOAA Regional Climate Centers

Types of Drought

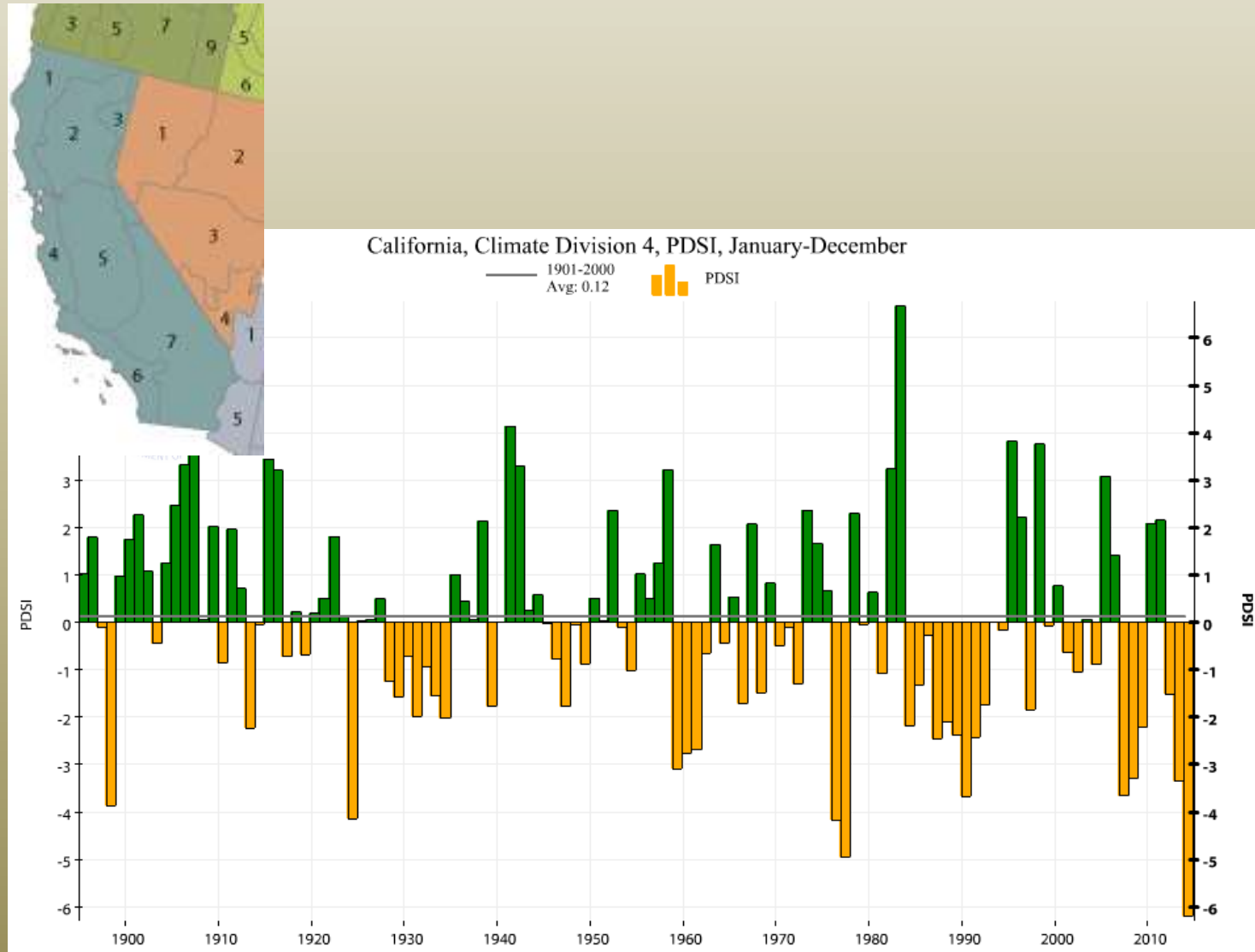
- Meteorological
 - Occurs when precipitation is deficient across an area for a prolonged time period
- Agricultural
 - Results in a loss of crop production.
 - Can occur independently from a meteorological drought when soil erosion restricts water supply to crops
- Hydrological
 - Occurs when water reserves fall below statistical averages
 - Can occur independently if water is diverted to another area

California's Ongoing Drought

Drought Monitor – March 31, 2015

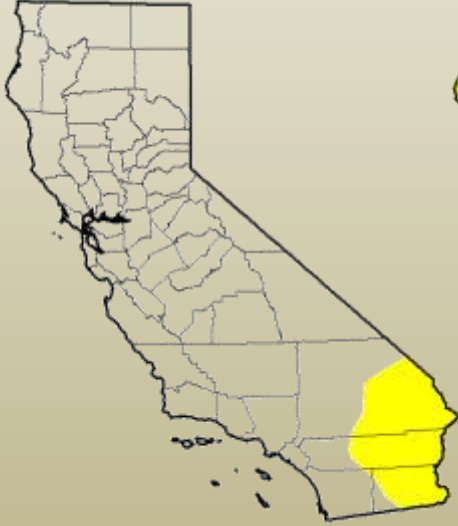


How bad is the drought?



Drought Progression

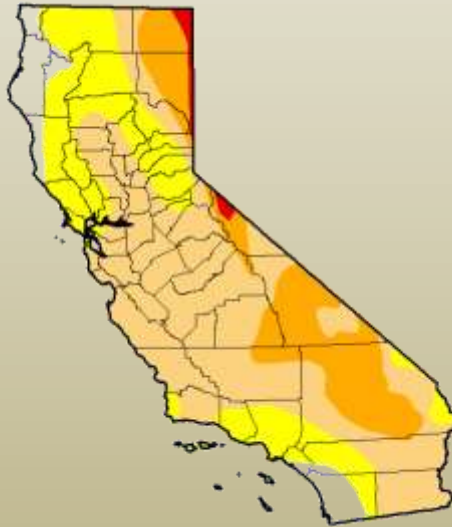
Fall 2011



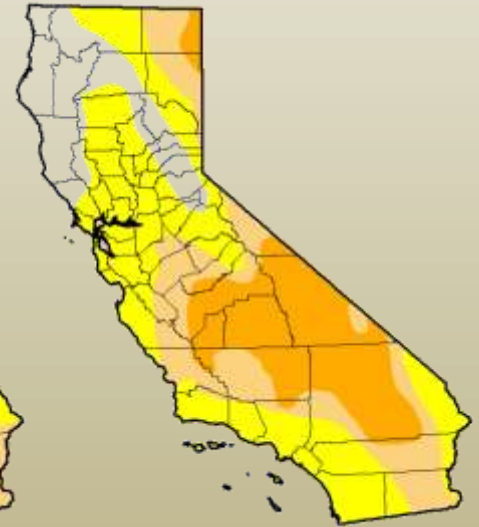
Spring 2012



Fall 2012



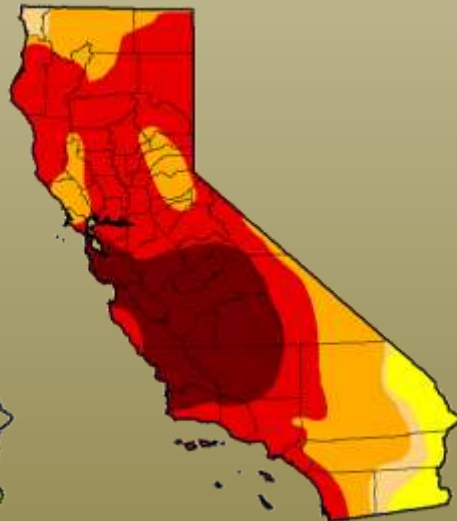
Spring 2013



Fall 2013



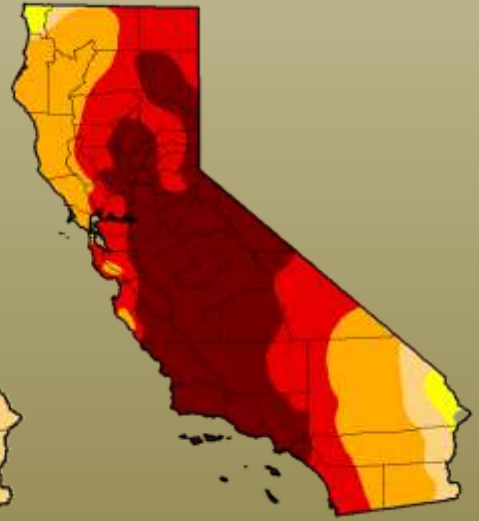
Spring 2014



Fall 2014



Spring 2015



Drought Stress



- Native brush is being stressed due to long term drought conditions
- The amount of dead fuel is increasing throughout the region



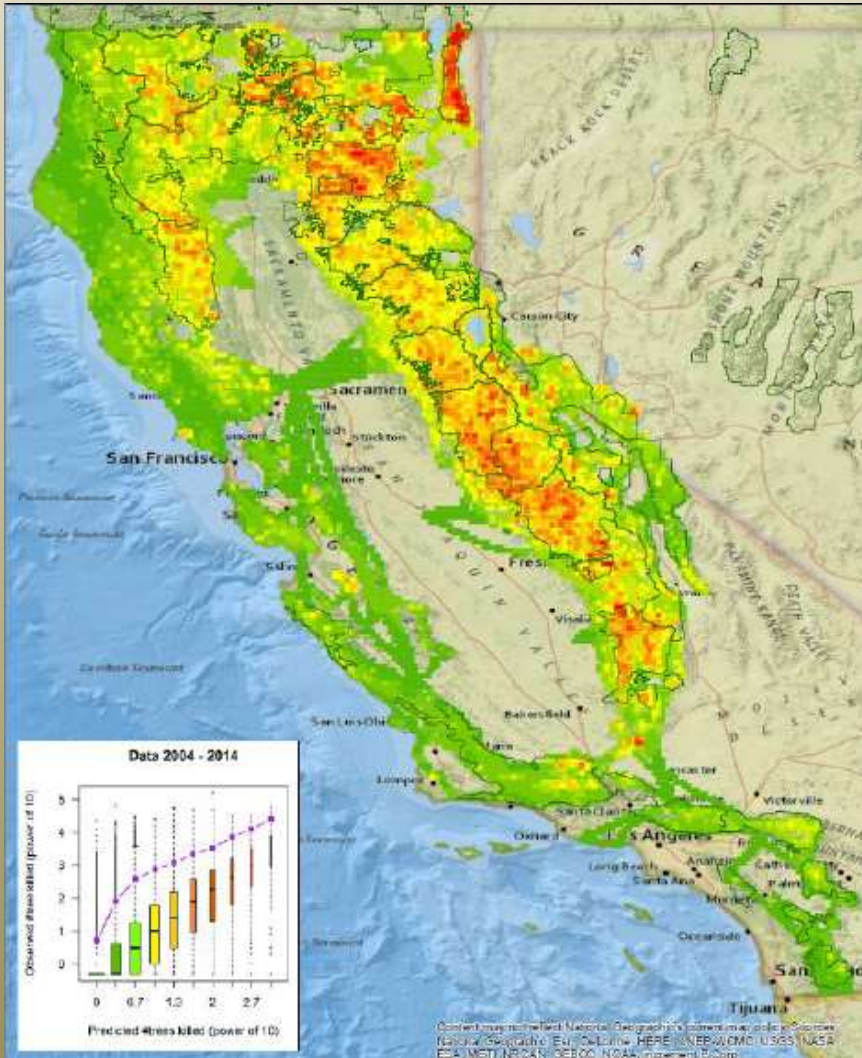
Bug kill in the southern Sierra



- Tree mortality has been steadily increasing across the Sierra and Sequoia NFs over the last several years
- Large stands of dead trees are becoming more prominent



Predicted Tree Mortality for 2015

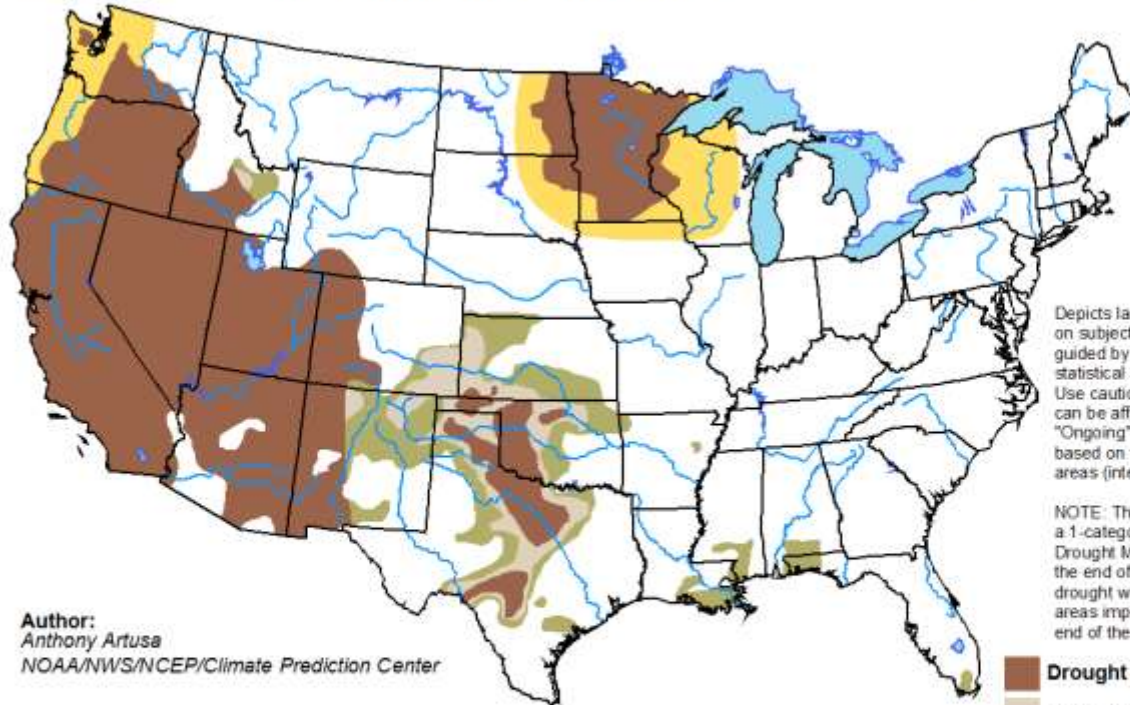


- Over 2 million trees died from bark beetles across 820,000 acres in 2014, which is double the acres with mortality from 2013.
- A dramatic increase in tree mortality is anticipated this year.

Drought Forecast

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period




Valid for March 19 - June 30, 2015
Released March 19, 2015

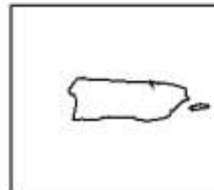


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U. S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center

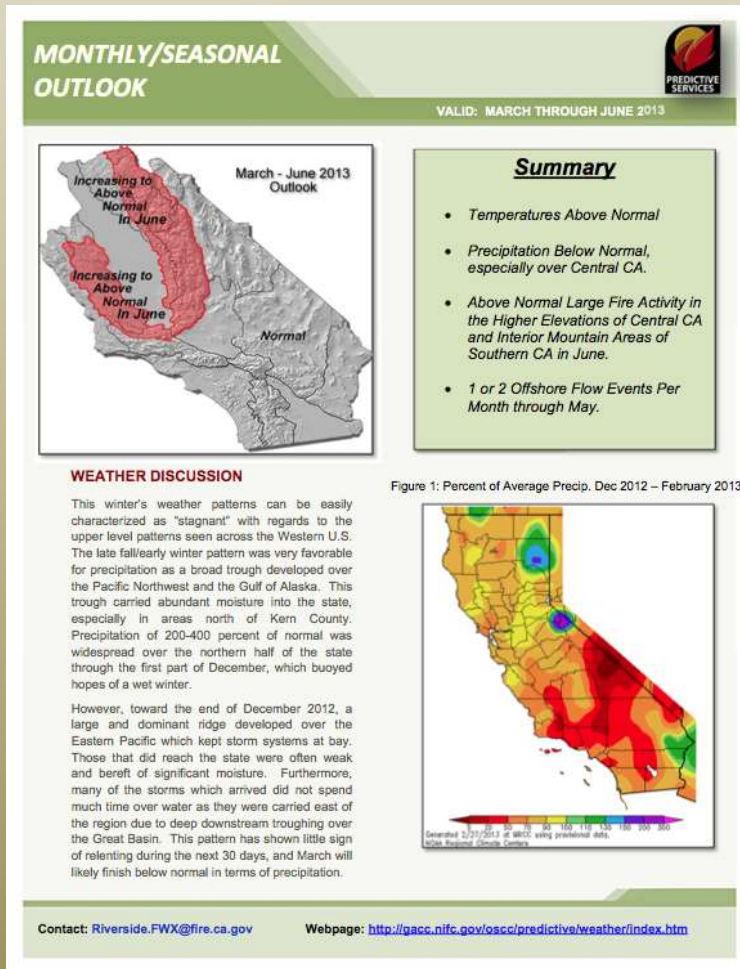
-  Drought persists/intensifies
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/hHTe>

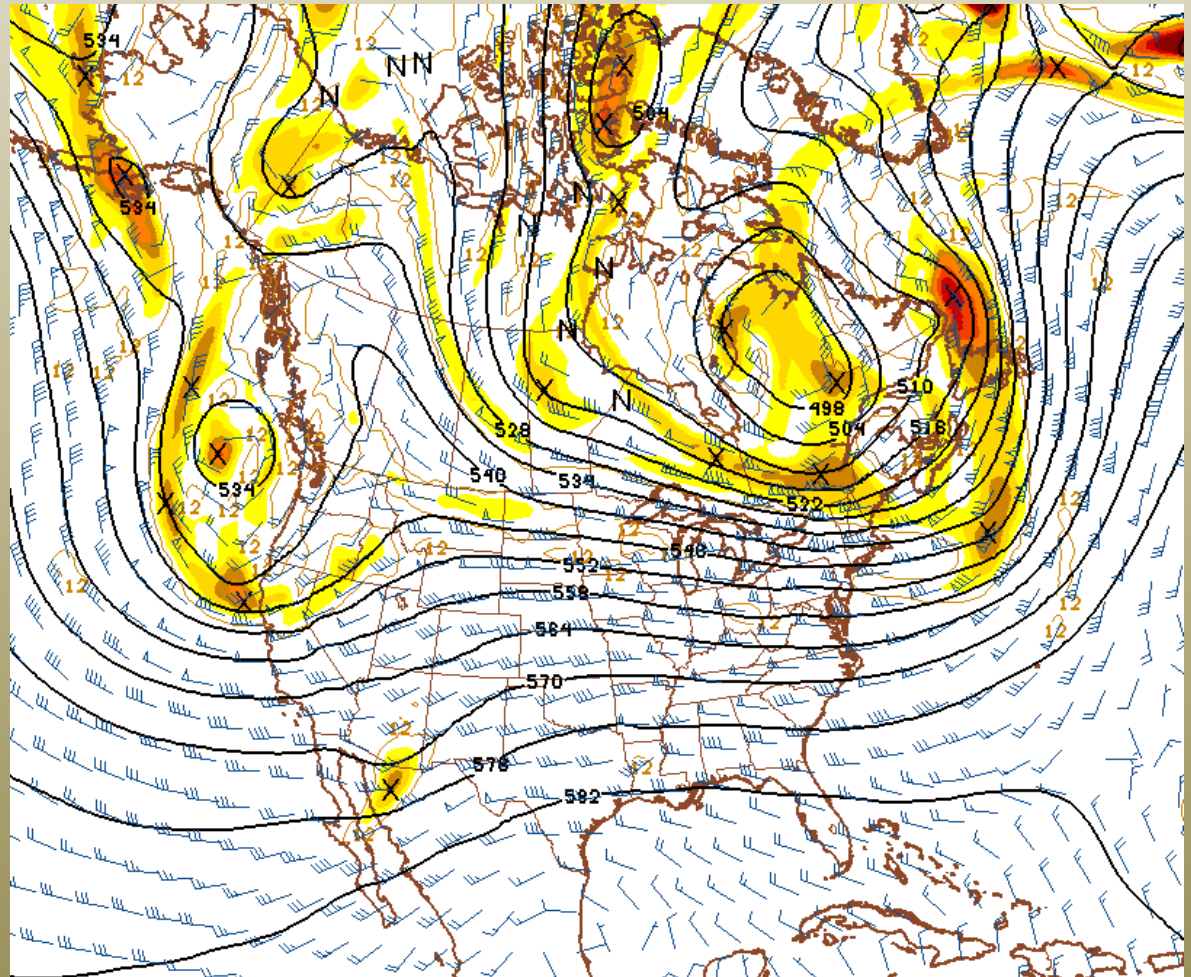
Monthly/Seasonal Outlook

<http://gacc.nifc.gov/oscc/predictive/outlooks/myfiles/assessment.pdf>

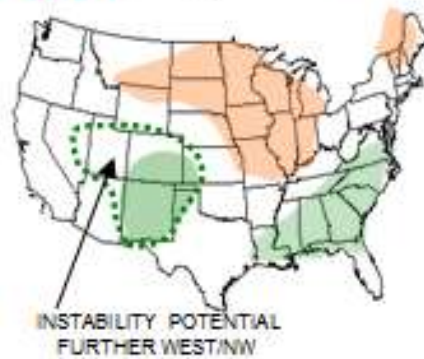
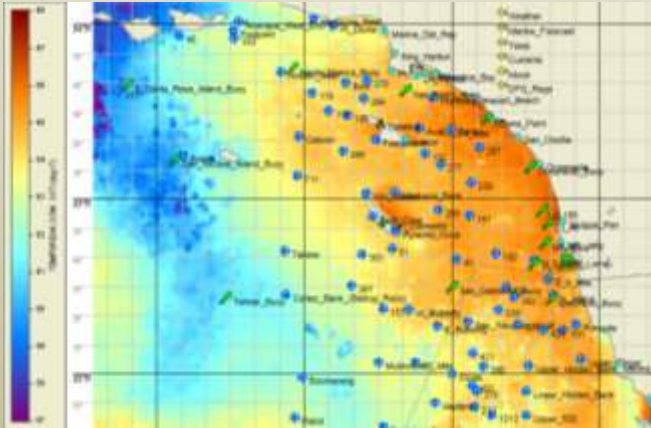


Spring Outlook

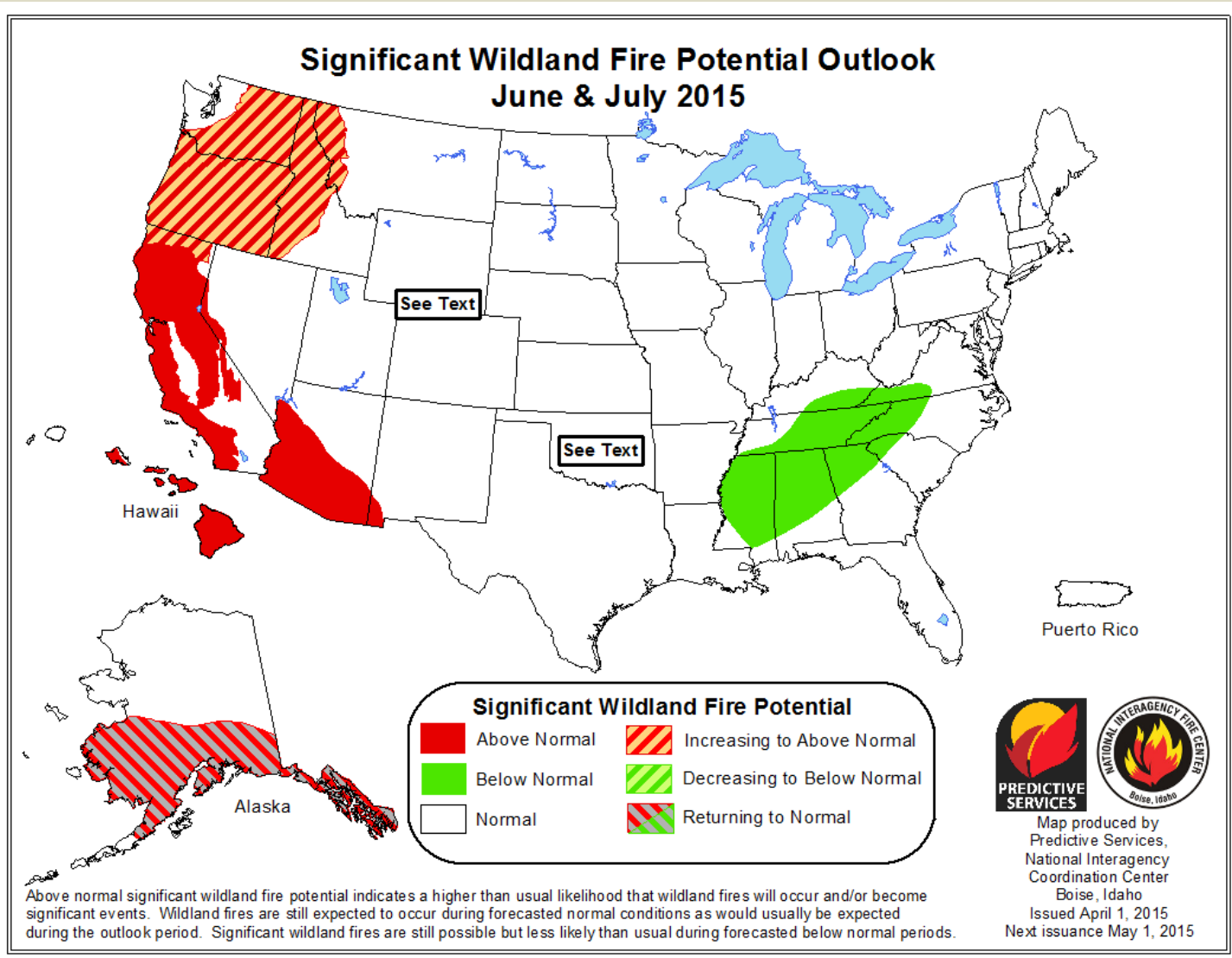
- The Eastern Pacific has recently become more active and it should remain active for the next 2 to 3 weeks.
- Temperatures will average near to below normal for the first half of April and precipitation will average near normal.
- Transitioning to a warmer and drier pattern toward the end of April and into May.



Spring/Summer Outlook



Outlook through July



Latest Fuel Conditions



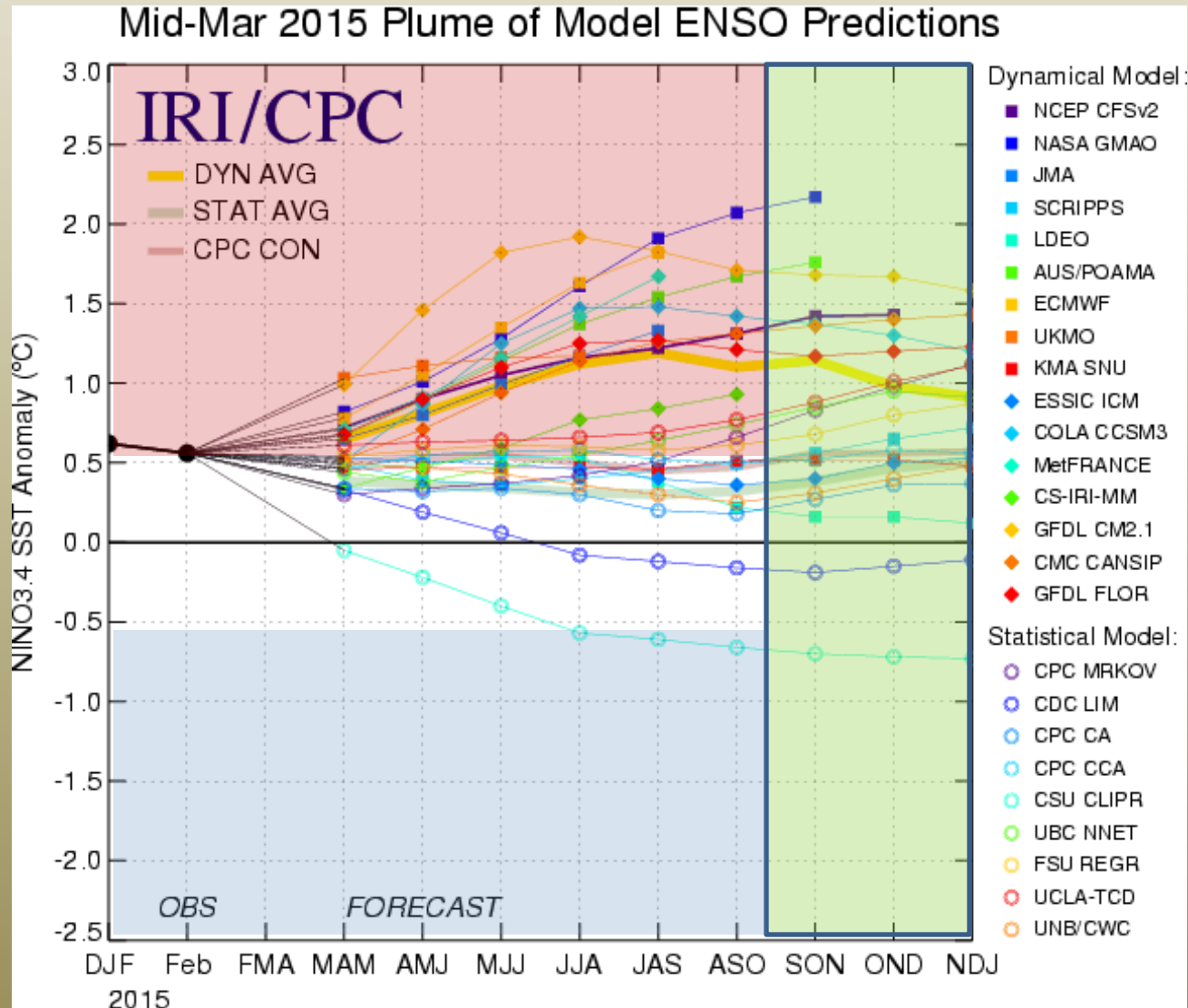
- Grasses are mostly cured on south facing slopes below 3,000 feet.
- Grasses will likely cure across the back country and higher elevations within the next month.



Fire Season Highlights

- Temperatures will average above normal through July
- Precipitation will average below normal through July
- Fire season expected to begin earlier than normal.
- Summer Monsoon could be active again this year across the deserts and the Sierra.
- Pacific tropical season has the potential to be very active
- Greatest fire potential will be across the southern and central Sierra as well as the southern portion of the LP
- If fire suppression efforts remain aggressive and number of ignitions are below normal, then significant fire activity will be at a minimum despite very dry fuel conditions.

A glimmer of hope?



Thank you and be safe!

Tom Rolinski

thomasrolinski@fs.fed.us

951-782-4849

<http://gacc.nifc.gov/oscc/predictive/weather/>